Lake Michigan Game Fish
Life History

Lake Trout

Common Names: Lake trout, laker, grey trout, Mackinaw, Great Lakes trout

Scientific Name: *Salvelinus namaycush*

Length: 17-36 inches

Weight: 3-30 pounds
State Record: (9/9/46) 47 lbs. from Lake Superior
State Record (Inland): (6/1/57) 35 lbs. 4 oz. from Big Green Lake, Green Lake County

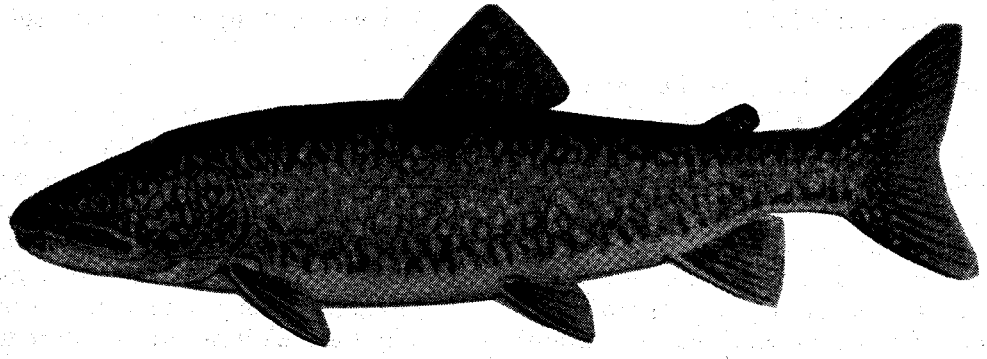
Identification: Lake trout are distinguished by having a deeply forked tail, the inside of their mouth white, and 10-11 rays in their anal fin. The color of the lake trout varies from light green or grey to dark green or almost black with light spots and worm-like markings on their back and sides.

Distribution: Lake trout are native to New England, the Great Lakes area, and Canada. In the Lake Michigan waters of Wisconsin, they can be found in the outer half of Green Bay and along the entire Lake Michigan shoreline.

Lake Michigan Sport Catch in Wisconsin: 100,000 per year

Preferred Temperature Range: 48-52°F; 9-11°C

Predators: Adults: Sea lamprey, human
Juveniles: Larger carnivorous fish
Eggs: Whitefish, burbot, and sculpin



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From the time of the last glacier until the 1800's, the lake trout lived in the Great Lakes with little or no change. By the 1880's though, through the influence of overfishing and pollution of spawning grounds, man started to deplete the seemingly endless supply of lake trout. Fishing pressure increased and the great stocks of lake trout dwindled even more. In the 1930's the parasitic sea lamprey invaded the upper Great Lakes from the Atlantic Ocean to prey upon the remaining large fish. Sea lamprey have no natural predators in the Great Lakes, so their population size increased at an epidemic rate. The enormous numbers of sea lamprey fed heavily on the lake trout and destroyed the surviving populations in Lake Michigan.

The disappearance of the lake trout in Lake Michigan was very dramatic. In 1944 the annual commercial catch of lake trout in Lake Michigan was over 6,000,000 pounds. By 1954 the total annual commercial catch had dropped to a mere 34 pounds and lake trout were probably extinct in Lake Michigan by 1956.

The loss of lake trout helped initiate the Great Lakes rehabilitation program. The first phase of this program consisted of attempting to control the sea lamprey, however, these early control efforts met with little success. Fortunately, in 1958 it was discovered that a chemical known as TFM would selectively kill sea lamprey larvae in streams without harming other aquatic life. Chemical control of sea lamprey using TFM started in 1960, and effectively reduced the population by 90%. Continued treatment of streams with TFM approximately every four years is still required to keep the population of sea lamprey at a manageable level.

Restocking lake trout, the second phase of the rehabilitation program, could begin with the sea lamprey population curbed. Lake trout restocking started in 1965 and has continued to the present with about 1,000,000 lake trout stocked each year in the Wisconsin waters of Lake Michigan. Unfortunately, successful natural reproduction of the lake trout has not taken place, even with many millions of fish planted. Stocking, therefore, remains essential to sustain the lake trout population in Lake Michigan.

Eggs for the hatchery program are collected from mature lake trout held in hatcheries in October and November. The eggs incubate about 90 days before hatching. After being reared in the hatchery for a year, they are stocked the following spring from April to June. The yearlings are planted either from shore near harbors or offshore on reefs where adults historically spawned. Before the lake trout are released, one or more of their fins are clipped to identify them as stocked fish. The appearance of large numbers of lake trout without finclips would signify successful natural reproduction of the lake trout. During their adult life, lake trout feed mainly on alewife, smelt, and sculpin. They usually mature at the age of 6 or 7 years (24 to 28 inches), and may live in excess of 20 years.

Lake trout are often referred to as the "Bread and Butter" fish of the trolling fisherman. This method of fishing is definitely the best way to land these prize fish, accounting for 95% of the total lake trout catch. To catch lake trout, lures should be trolled at 80 or more feet. Baits most often used are dodger and fly combinations, plugs, and spoons. Trolling produces good returns on lake trout from May to October, starting closer to shore in the spring and moving offshore to deeper water as the water temperature increases. Fishing is good along the entire Lake Michigan shoreline with excellent success from Sturgeon Bay to Kenosha.

Fishing from the shore or piers can also produce good catches of lake trout at certain times. Fish are most likely to be taken from the shallow waters during a west/northwest wind and especially in the early and late parts of the season. Favorite casting baits include spinners and spoons.

The lake trout stocking and sea lamprey control programs are both funded with federal monies. These are collected through an excise tax on sporting goods. In the future, about a million lake trout are planned to be stocked each year in the Wisconsin waters of Lake Michigan. Also, research is being conducted to solve the riddle of why the lake trout are not reproducing as they normally should. These activities will help in the reestablishment of the lake trout in Lake Michigan and help ensure quality fishing in the future.

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